

CLAIMS

What is claimed is:

- 1. An automatic cold water feed-back mechanism for a single handled faucet, including a valve housing for a valve stick, a base mount, a switching valve, a valve seat to be adapted therein; the present invention being characterized by that,
--a limiting valve is mounted at the upper section of the valve housing and a cold water feed-back mechanism is mutually engaged with the limiting valve thereof wherein the cold water feed-back mechanism is linked with the valve stick thereof in movement so that when the valve stick is switched off at the position of either mixed cold/hot water or hot water discharge, the cold water feed-back mechanism will flexibly retract the valve stick thereof back to its position of cold water discharge; thus, the faucet can automatically resume its position and safely keep in the state of cold-water discharge if switched open again in use, efficiently avoiding the ignition of a hot water supplier instantaneously so as to prevent the waste of energy, and securely protecting the safety of children in the family without being scared or even scalded by hot water accidentally in practical use.**
- 2. The automatic cold water feed-back mechanism for a single-handled faucet as claimed in Claim 1 wherein the limiting valve is made up of an arc-shaped locating groove preset at the inner wall therein, a through hole communicating with the locating groove thereof, an annular stop flange protruding outwards at the upper opening thereof, a movement space properly cut at the outer periphery of the stop flange thereon, a limiting block protruding at the upper surface of the stop flange thereon, and a stepwise limiting seat extending outwards at the lower**

opening thereof.

3. The automatic cold water feed-back mechanism for a single-handled faucet as claimed in Claim 1 wherein the valve stick is provided with a linkage rod properly protruding at the upper surface of a valve stick seat.

4. The automatic cold water feed-back mechanism for a single-handled faucet as claimed in Claim 1 wherein the cold water feed-back mechanism is made up of an actuating member and a spring member; the actuating member has a limiting engaging hole disposed at the center thereon to be registered with the limiting valve thereby, and a locating support block extending transversely inwards at one side of the upper edge thereon; a coupling hole shaped like the linkage rod of the valve stick thereof and a fixing hole are respectively disposed at the surface of the locating support block thereon; the spring member is provided with an actuating insert leg protruding vertically upwards at the upper edge thereon, and an L-shaped locating hook extending inwards at the lower edge thereof.